

REMARKS UNDER 37 CFR § 1.111

Formal Matters

Claims 1-8, 10-12, 15 and 17-20 are pending after entry of the amendments set forth herein.

Claim 16 has been canceled above, without prejudice to the possibility of filing one or more continuing applications directed to the subject matter recited therein.

Claims 1-8, 10-12 and 15 were examined. Claims 1-8, 10-12 and 15 were rejected.

Applicants respectfully request reconsideration of the application in view of the amendments and remarks made herein.

No new matter has been added.

The Telephone Interview

Applicants wish to extend their appreciation to the Examiner for the courtesy provided to Applicants' representative during the telephone interview of August 14, 2007. During the Interview, Applicants' representative presented the above amendments of the claims as proposals to overcome the rejections of the claims under 35 U.S.C. Section 112, first and second paragraphs. The Examiner indicated that the proposals were reasonable and would likely overcome the grounds of rejection, but reserved making a final determination until after review of this amendment.

This account is believed to be a complete and accurate summary of the interview as required by 37 C.F.R. § 1.133. If the Examiner believes that this summary is inaccurate or incomplete, Applicants respectfully request that the Examiner point out any deficiencies in her next communication so that Applicants can amend or supplement the interview summary.

The Office Action

Claim Rejected Under 35 U.S.C. Section 112, First Paragraph

In the Official Action of May 24, 2007, claims 1-8, 10-12 and 15 were rejected under 35 U.S.C.

Section 112, first paragraph as failing to comply with the written description requirement. The Examiner asserted that the recitation of “majority of target molecules” in independent claims 1 and 10 was not supported by adequate written description in the specification, since the specification describes hybridizing to larger fractions of target molecules, but the Examiner asserted that large fractions can be less than a majority. In response thereto, in order to advance the prosecution of the instant application, Applicants have amended claims 1 and 10 above to delete “majority” and insert therefore –large fraction—in accordance with the discussion held with the Examiner during the above-noted telephone interview. Accordingly, Applicants respectfully submit that this ground of rejection is no longer applicable. However, Applicants disagree that the term majority is not supported, since page 25, line 27 describes almost all molecules are hybridizable to, and page 27, line 22 indicates that all molecules are hybridizable thereto. It is respectfully submitted that “almost all” and “all” are examples of majorities.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-8, 10-12 and 15 under 35 U.S.C. Section 112, first paragraph as failing to comply with the written description requirement, as being inappropriate.

Claim Rejected Under 35 U.S.C. Section 112, Second Paragraph

Claims 1-8, 10-12 and 15 were rejected under 35 U.S.C. Section 112, second paragraph as being indefinite.

Regarding claim 1, the Examiner asserted that it was not clear what was meant by “corresponding signal intensities”. In response thereto, Applicants have amended claim 1 to clarify this portion of the claim by deleting “corresponding signal intensities” and revising this portion of the claim to recite – wherein upon scanning the calibration probes after they have been hybridized with the target molecules, the scanning of the hybridized probes produces signal intensities--.

Further with regard to claim 1, the Examiner asserted that it was unclear as to whether “hybridizing to specific target molecules” and “under stringent conditions” also apply to the calibrating probes. In response thereto, Applicants clarify that the calibrating probes hybridize to large fractions of the molecules, and accordingly are not targeted to specific molecules, although they do hybridize to many, if not all of the specific molecules. With regard to “under stringent conditions”, claim 1 has been amended to clarify that the hybridization of the calibration probes is also performed under stringent conditions.

Claims 1 and 10 were rejected, the Examiner indicating that the singular form of the term

“concentration” made the metes and bound of the claims unclear. In response thereto, claims 1 and 10 have been amended to change “concentration” to --concentrations--.

Further with regard to claim 1, the Examiner indicated that it was unclear as to what was meant by individual intensities. In response thereto, the term “individual” has been deleted. It is respectfully submitted that it is now clear that the intensities of the feature and calibrating features are read.

Still further with regard to claim 1, the Examiner asserted that the phrase “the calculated collective calibration signal” lacked clear antecedent basis. In response thereto, claim 1 has been amended above to change “the calculated collective calibration signal” to --a calculated collective calibration signal--.

With regard to claim 2, the Examiner indicated that it was not clear whether the phrase “probes contained in the molecular array” referred to all the probes including the calibrating probes. In response thereto, claim 2 has been amended to clarify that the objected to phrase refers to -- said probes that hybridize to specific target molecules--. As to the Examiner’s remarks regarding “cDNA copies” and “cDNA transcripts”, claim 2 has been amended to clarify that --said probes that hybridize to specific target molecules are oligonucleotides complementary to portions of cDNA products of reverse transcription of eukaryotic mRNA molecules--. Claims 3-6 have been amended similarly.

With regard to claim 7, the Examiner asserted that “the set of calibrating signal intensities” lacked clear antecedent basis. In response thereto, Applicants have amended claim 7 to clarify that -- the calculated collective calibration signal is calculated by calculating a collective calibration signal intensity from the signal intensities read from the calibrating features--.

Further with regard to claim 7, the Examiner indicated that the phrase “the feature of the molecular array” lacked antecedent basis”. In response thereto, claim 7 has been amended to clarify it by deleting “features of the molecular array” and inserting therefore --the probes that hybridize to specific molecules--.

In view of the above amendment and remarks, the Examiner is respectfully requested to reconsider the rejection of claims 1-8, 10-12 and 15 under 35 U.S.C. Section 112, second paragraph as being indefinite, as being no longer appropriate.

New Claims 17-20

New claims 17-18 have been added above, each of which depends from claim 1. New claims 19 and 20 have been added above, each of which depends from claim 10. Claims 17 and 19 each further

recite that the calibrating probes hybridize to almost all of the target molecules in sample solutions.

Support for this amendment can be found, for example, in the specification at page 25, line 27. Claims 18 and 20 each further recite that the calibrating probes hybridize to all of the target molecules in sample solutions. Support for this amendment can be found, for example, in the specification at page 2, line 22.

It is respectfully submitted that each of new claims 17-20 are allowable over the art of record, and an indication of the allowance of claims 17-20 is respectfully requested in the next Official Action.

Conclusion

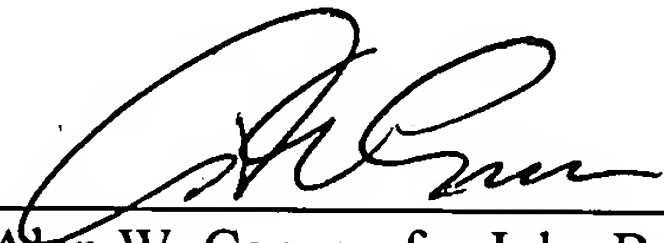
Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10020405-1.

Respectfully submitted,

LAW OFFICE OF ALAN W. CANNON

Date: 8/14/07

By: 
Alan W. Cannon for John Brady
Registration No. 34,977

John Brady
Agilent Technologies, Inc.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599
Telephone: (408) 553-3584
Facsimile: (408) 553-2365